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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.        | CONFIRMATION NO.       |
|---|-------------|----------------------|----------------------------|------------------------|
| 10/665,441  | 09/18/2003  | Earl O. Bergersen    | BER-P-03-054               | 7298                   |
| 29013   | 7590        | 07/02/2007           |                            |                        |
| PATENTS+TMS, P.C.<br>2849 W. ARMITAGE AVE.<br>CHICAGO, IL 60647 |             |                      | EXAMINER<br>LEWIS, RALPH A |                        |
|   |             |                      | ART UNIT<br>3732           | PAPER NUMBER           |
|   |             |                      | MAIL DATE<br>07/02/2007    | DELIVERY MODE<br>PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/665,441

Applicant(s)

BERGERSEN, EARL O.

Examiner

Ralph A. Lewis

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-87 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-87 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **Objection to the Drawings**

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the appliance having both embedded wires and suction cups (claims 7, 14-20 and 40) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### **Rejections based on 35 U.S.C. 112, first paragraph**

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 7, 14-20 and 40 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

There appears to be no support in the originally filed papers for a dental appliance having both suction cups and embedded wires as is now claimed.

### **Obvious-Type Double Patenting Rejections**

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-87 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over

Claims 1-110 of copending Application No. 10/447,099;

Claims 1-114 of copending Application No. 10/449,292;

Claims 1-139 of copending Application No. 10/449,312;

Claims 1-82 of copending Application No. 10/760,604; and

Claims 1-51 of copending Application No. 11/257,330

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the present application are merely obvious variations of the claims presented in applicant's other applications. Merely rearranging the order of claimed elements and using different wording to refer to the same subject matter would have been obvious to the ordinarily skilled artisan.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### **Rejections based on Prior Art**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 8-13, 21-34, 44-51, 58-66 and 68-87 are rejected under 35 U.S.C. 102(b) as being anticipated by Bergersen (US 5,645,420).

Bergersen '420 discloses a dental appliance having a general U-shaped base (Figure 2), flat occlusal surface 50 (note Fig 5), first wall 26, second wall 28, slot 22 whose width increases from the front (Figure 3) to the rear (Figure 5). In regard to claim 4, note lingual tabs 34. In regard to claim 5, note column 10, line 64. In regard to claim 6, note column 8, lines 1-22. In regard to claim 8, note wedges 22 (Figure 3). In regard to claim 9, note Fig 15. In regard to claim 21, note column 4, lines 8-9, which indicate that the device is made in various sizes, whether or not two different sized appliances are worn consecutively or not by a particular user is a matter of intended use and fails to impose any objectively ascertainable structural distinctions between the currently claimed set and that disclosed by Bergersen '420. Additionally, in regard to claim 21, Bergersen '420 discloses a second portion 60 of the device which is made of a softer material and which contacts a second set of teeth which is different from the first set of

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teeth which are not contacted by the softer material 60. In regard to claims 25 and 26, the manner in which applicant intends for the claimed devices to be made, fails to impose any objectively ascertainable structural distinctions from the devices disclosed by Bergersen '420. In regard to claim 27, the Bergersen '420 appliances with softer material 60 and appliances without softer material 60.

In response to the rejection of claim 1, applicant added the further limitation that the dental appliance has a wire embedded in the base that clasps one of the teeth. Applicant's earlier '420 patent has an embedded wire 104 to "assist in maintaining the desired buccal expansion dimension or other configuration of the appliance" (column 10, lines 4-10). It appears to this examiner that the inherent resiliency of the embedded wire would serve to help clasp the appliance to the patient's teeth.

In response to the rejection of claim 8, applicant further defined the socket in the appliance which is to receive the canine teeth and the wedge structure formed in the socket. The Bergersen '420 appliance has a socket 22c (Figure 2) for the canine and that socket has an angled (wedge) wall (all the way around, including its sides) that pushes or maintains the position of the tooth as is desired

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 12, 34, 44-51, 68-72 and 85-87 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergersen (US 5,645,420) in view of Kesling (US 3,178,820) and Bergersen (US 4,193,944).

To the extent that the Bergersen '420 embedded wire 104 fails to "clasp one of the teeth", it is noted that such embedded wire clasps are old and well known. Over 40 years ago Kesling disclosed such embedded wire clasps 21 in order to properly fit and secure the appliance within the patient's mouth. Applicant even acknowledges the prior art in his earlier patent 4,193,944 (column 6, lines 20-24). Merely, adding the prior art embedded clasps to the '420 device in order properly fit and secure the device as is taught by Kesling and Bergersen '944 would have been obvious to the ordinarily skilled artisan.

Claims 14-17, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andrews (US 4,591,341) in view of Kesling (US 3,178,820) and Bergersen (US 4,193,944).

In Andrews, note mouthpiece 10 with suction cups 14, 16, 20, 24, 26 and 30. In regard to claim 15, the suction cups are removable with the proper tools. In regard to the embedded wire limitation, it is noted that such embedded wire clasps are old and well known. Kesling discloses such embedded wire clasps 21 in order to properly fit and secure the appliance within the patient's mouth. Applicant even acknowledges the prior art in his earlier patent 4,193,944 (column 6, lines 20-24). Merely, adding the prior art embedded clasps to the Andrews device in order properly fit and secure the device

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as is taught by Kesling and Bergersen '944 would have been obvious to the ordinarily skilled artisan.

Claims 6, 42 and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergersen (US 5,645,420) in view of Watson et al (US 5,328,362).

Watson et al teach the construction of dental appliances of a first relatively rigid material and a second relatively soft resilient material for aiding in the proper movement of the patient's teeth. To have constructed the Bergersen orthodontic appliance of hard and soft materials as taught by Watson et al in order to aid in the proper movement of the patient's teeth would have been obvious to one of ordinary skill in the art.

Claims 7, 18, 40 and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergersen (US 5,645,420) in view of Andrews (US 4,591,341).

Andrews teaches the use of small suction cups (14, 16, 20, 24, 26, 30) positioned in an orthodontic appliance in order to provide increased adherence and firmly hold the teeth together in the desired position. To have provided the Bergersen orthodontic appliance with small suction cups in order to provide increased adherence and firmly hold the teeth together in the desired position as taught by Andrews would have been obvious to one of ordinary skill in the art.

Claims 21-39, 41-43 and 52-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bergersen (US 5,645,420).

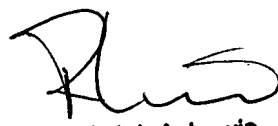


In regard to claims 21-34, merely providing for two different sized mouthpieces in order to treat multiple patients or a single patient multiple times would have been obvious to one of ordinary skill in the art. In regard to claims 35-37, it would have been obvious to the ordinarily skilled artisan to position the wire 104 at the surface of the mouthpiece to better position the user's teeth. Finally in regard to claims 52-57, it most certainly would have been obvious to the practitioner to explain to the patient the orthodontic procedure being under taken.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication should be directed to **Ralph Lewis** at telephone number **(571) 272-4712**. Fax (571) 273-8300. The examiner works a compressed work schedule and is unavailable every other Friday. The examiner's supervisor, Cris Rodriguez, can be reached at (571) 272-4964.

R. Lewis  
June 18, 2007



Ralph A. Lewis  
Primary Examiner  
AU3732